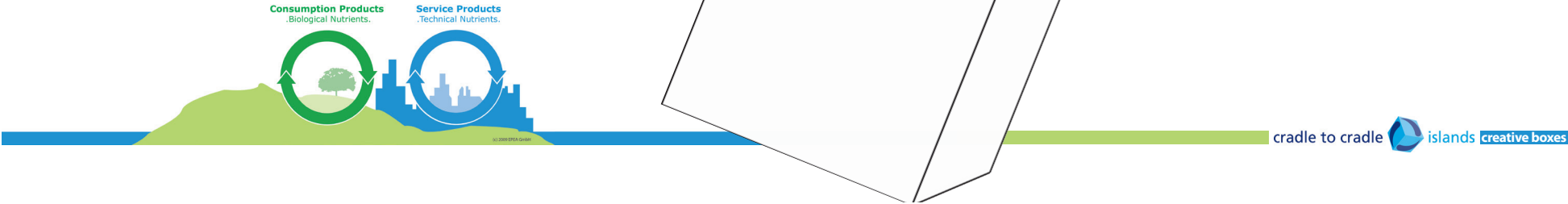


THE CRADLE TO CRADLE® CREATIVE BOXES BOOKLET

EPEA Internationale Umweltforschung GmbH

Get inspired!





CRADLE TO CRADLE®

EPEA Internationale Umweltforschung GmbH

Remaking the way we make things

Cradle to Cradle® is a design paradigm that focuses on innovation to enhance the quality of products so they are:

- more practical for the user
- healthier for everyone affected by the product
- beneficial for the economy and the environment.

The three principles of Cradle to Cradle®

Quality enhancement is achieved by focusing on three innovation principles:

1. Everything is designed to be a nutrient for something else (Waste = Food).
2. Use renewable energy produced from current solar income.
3. Support diversity including conceptual, cultural and biodiversity.

Biosphere and Technosphere

To apply those principles, Cradle to Cradle® focuses on optimizing the intended use of a product. It distinguishes between two main intended pathways that products follow: consumption pathways where products are designed to safely enter biological systems, and service pathways where products safely enter technical systems to be part of new future product generations.

Products for consumption are designed so that degradation by-products generated during their use (e.g. abrasion or dilution in air, water or soil) can support the biological systems they enter. Biological resources can be renewed through agriculture or reforestation leading to next generations of products. Examples of consumption products are: biodegradable textiles, cosmetics or vehicle brake pads that wear out.

Products for service are designed to be chemically stable during use and get dismantled into technical resources, known as 'nutrients' after they have fulfilled their function. The ingredients in these renewed technical nutrients are carefully defined so they can serve as resources for producing next generations of service products. Examples of technical nutrients are electronic appliances and cars.



Cherry blossoms © Gordon Bussiek | photocase.com

The founder of Cradle to Cradle®

The Cradle to Cradle® design concept is an idea of the German chemist Prof. Dr. Michael Braungart and the American architect William McDonough. Its basis is the Intelligent Product System (IPS) that Braungart's company EPEA (Environmental Protection Encouragement Agency) developed from 1987 to 1992. Currently, hundreds of enterprises around the world offer products designed after the Cradle to Cradle® design concept – among them many are from the Netherlands, the United States of America, Taiwan, Denmark, Austria, Switzerland and Germany. Even local authorities or institutions use it in their procurement.

Please find further information, pictures and current events on

www.epea.com

www.c2c-world.com

www.facebook.com/c2cworld



Michael Braungart
Copyright: Speakers Academy® - Edith Stenhuys

THE CRADLE TO CRADLE ISLANDS PROJECT

An Interreg IVB North Sea Region Project

“The islands in the Cradle to Cradle Islands Project will be a blueprint of what will be possible in the future.”

Michael Braungart

Who are the members?

The transnational partnership consists of island communities, governments, research centers, knowledge institutions and companies in the North Sea Region. The Province of Fryslân, The Netherlands, is the initiator and leading partner. This results in a unique partnership that will tackle the joint problems on islands and come up with innovative Cradle to Cradle® solutions for energy, mobility, water and materials.

What is the focus?

The project focuses on three themes: energy (incl. mobility), water and materials. Depending on the local situation on each island, one or more of the following activities will be carried out under guidance of Prof. Dr. Han Brezet of the Delft University of Technology (activities energy), ir. Heleen Sombekke of Wetsus Centre of Excellence for Sustainable Water Technology (activities water) and Prof. Dr. Michael Braungart/EPEA GmbH (activities materials).

Why the Cradle to Cradle Islands Project?

These islands are excellent locations for experiments with innovative solutions, because they have a lot in common:

- Large number of visitors in summer, who are attracted by the nature and beauty of the islands
- High demands on water, energy, transport and goods in the peak season
- The ambition to become independent and self-supporting in energy and water
- High visibility of activities
- Being suitable places for education on innovation





Please find further information on

www.c2cislands.org

www.wisle.org

www.fryslan.nl

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THE CRADLE TO CRADLE® CREATIVE BOXES

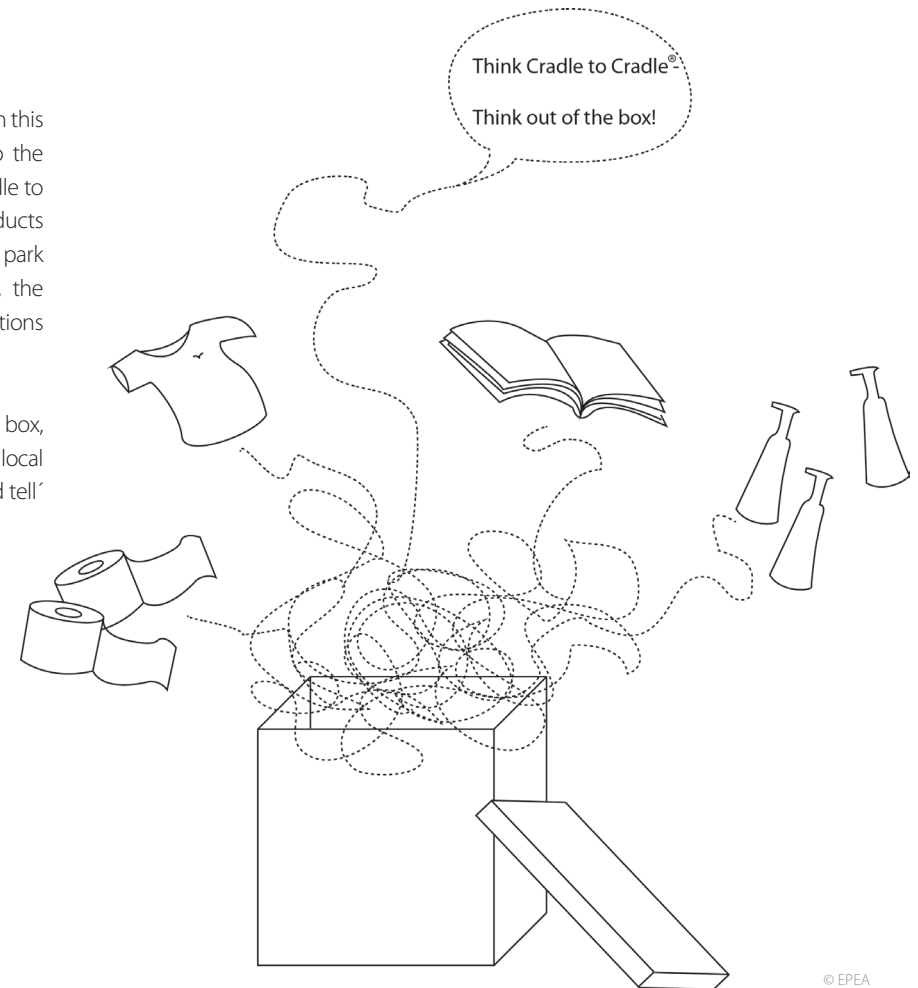
Get inspired!

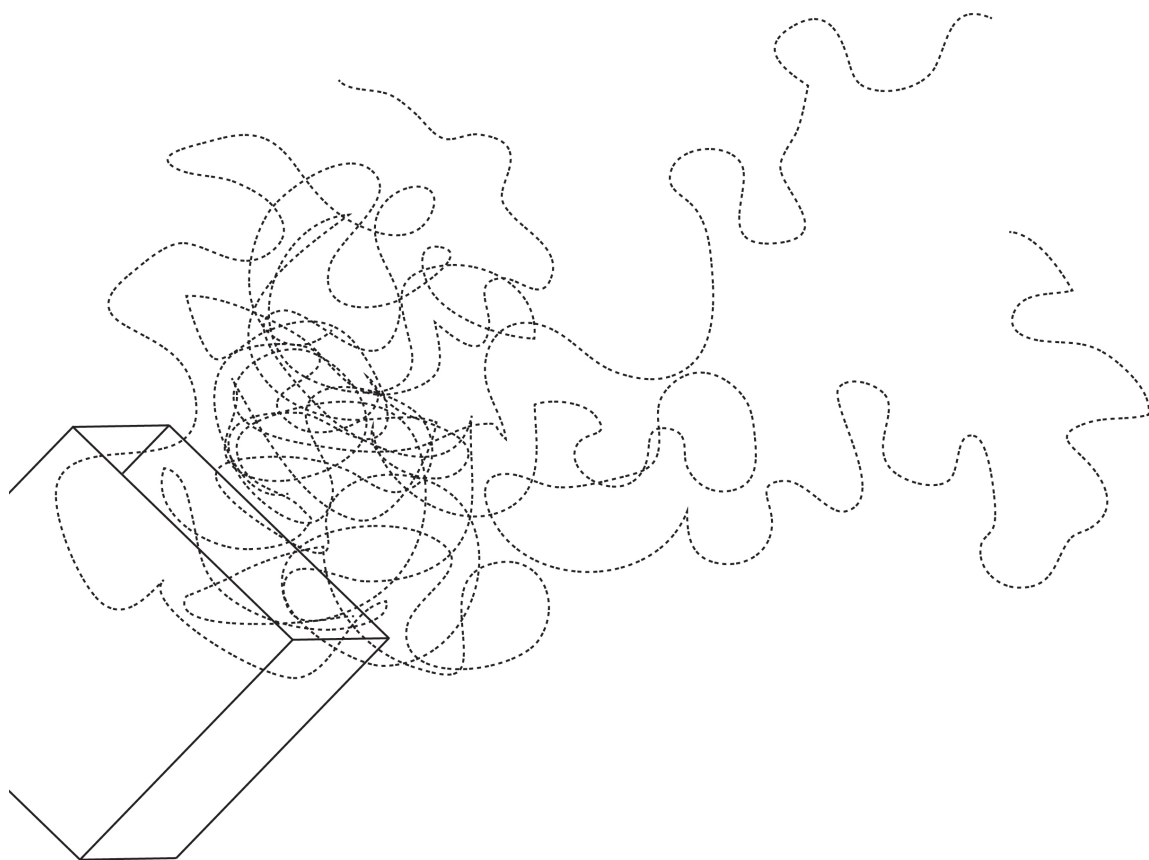
Translating the Cradle to Cradle® concept from an inspiring vision to practical applications is frequently perceived as a challenge. Yet there are many examples already existing in the global market where companies are optimizing products and processes in accordance with the Cradle to Cradle® design principles.

Early on in the C2CIslands project it was discussed how to make Cradle to Cradle® more tangible for partners and their local stakeholders. Different approaches have been initiated so far, ranging from workshops organized in the local community to project descriptions in the national languages of the partners. Another approach has been to develop a collection of Cradle to Cradle® product samples so that people can see and touch existing Cradle to Cradle® products. EPEA developed extensive exhibits for the NUTEC fair in Frankfurt and other smaller exhibits, but instead of just copying these, the C2CIslands partners decided to have a toolbox with which to create their own exhibits. Thus the idea of 'Cradle to Cradle® Creative Box' was born.

Creative Boxes contain product samples together with this booklet describing the product, whether it fits into the biosphere or the technosphere, and what else is Cradle to Cradle® about it. Many Cradle to Cradle® certified products are too large to fit into a sample box, e.g. office chair, park bench, building materials etc. For these products, the creative box contains product brochures and descriptions in this booklet.

With this booklet and the samples from the creative box, partners can then develop their own activities with local stakeholders in their communities, such as 'show and tell' or individual exhibits.





AVEDA

The Art and Science of Pure Flower and Plant Essences™

www.aveda.com

Aveda™ was founded in 1978 with the goal of providing beauty industry professionals with high performance, botanically based products that would be better for service providers and their guests, as well as for the planet. Aveda manufactures professional plant-based hair care, skin care, makeup, Pure-Fume™ and lifestyle products. Headquartered in Blaine, Minnesota, Aveda is available in Aveda stores, and in nearly 7,000 professional hair salons and spas in 24 countries worldwide. Aveda believes that authentic beauty is one that works in harmony with the greater web of life. It does not qualify as beauty if it hurts any of the diverse life forms that the best beauty artist of all, Nature, created. Authentic beauty cares for the environment which we inherited from elders and will leave to generations that follow us. Beauty cares for the society in which we live, enhancing harmony in the way we live and interact with one another as human beings. Aveda continually seeks to increase the use of naturally-derived ingredients in the products.

‘Green Ingredients’ are one or more of the following:

- Sourced from organic, sustainable or renewable plant-based origins
- Represent ecological and cultural diversity by being sourced from different habitats all over the world
- Provide fair compensation to suppliers
- Do not negatively impact the ecosystems from which they are sourced
- Are biodegradable
- Involve environmentally responsible processing (for example, steam distillation rather than chemical extraction of essential oils)
- Are animal friendly (Aveda does not conduct animal testing on its products or ask others to do so on their behalf except if required by law, and actively supports the development of alternative methods to animal testing)





Gold Silver

Certified Product - Cosmetic Ingredients

Certified Product - Packaging



The product series

Aveda is the first beauty company in the world to receive a Cradle to Cradle® certificate, which marked a further milestone in its 31 years of socially and environmentally responsible company history. Following Aveda's Cradle to Cradle® certification for four organic ingredients, several products from Aveda have also been awarded with the Cradle to Cradle® Gold certificate. Among the hair care products for women, these are Dry Remedy™ Shampoo and Conditioner, as well as Smooth Infusion™ Shampoo and Conditioner, and for men Pure Formance™ Shampoo and Conditioner. The research and development team is constantly searching for new plants and progressive manufacturing methods, to increase the content of natural ingredients. More than 50% of the materials used are plant-based. 89% of the plant-derived ingredients (in tons) and 90% of the essential oils come from controlled organic cultivation. According to the Cradle to Cradle® philosophy, the products are made to be safe for the biological cycle and therefore are safe for humans as well.

Aveda also cares for the packaging they use. At Aveda one is mindful of the need to reduce the environmental

footprint in every package developed. This is achieved by minimizing the packaging, maximizing the use of post-consumer recycled materials, using materials that can be and are recyclable, and by designing the packaging so that the individual parts can be separated for recycling.



Your contact at Aveda Corp.
Chuck Bennett - cbennett@aveda.com

© Aveda

GUGLER* CROSS MEDIA

thinks further

www.gugler.at

www.greenprint.at

www.vonderwiegezurwiege.at



gugler* is a specialist for printing – offset printing as well as digital printing. The family-owned company sets a high value on holistic thinking and responsibility with regards to the quality of life of both, today's and future generations; and therefore is aware about its environmental impact. That's why gugler* has decided to become part of the Cradle to Cradle® community. A Cradle to Cradle® is on the way and first eco-effective printing products will be out soon.

Eco-effective printing products

What is the recent innovation? Waste paper can be recycled, but not without producing problematic waste materials. The de-inking process involves separating the pulp from printing inks and coatings, leaving behind a toxic sludge that must be disposed of as special waste. gugler* has therefore set themselves the goal of developing printed products that can be recycled without leaving behind any toxic substances and instead be returned to the organic cycle as valuable biomass. Each order you place with gugler* supports this journey towards the compostable printed product.

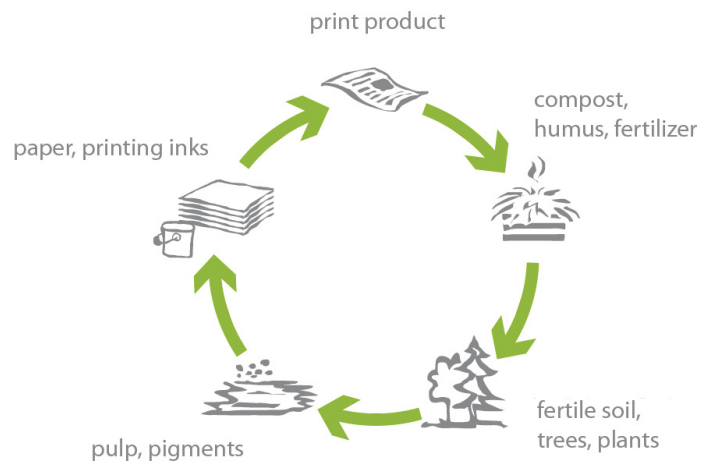


© 2009 EPEA GmbH

© Gugler



gugler*
cross media



Printing tests done at gugler* ended up very successful. Thus gugler*'s eco-effective printing products are on their way.



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LALADOO

Designed for baby joy

www.laladoo.nl

'Are you looking for an attractive and unique baby gift? Laladoo makes products that not only look wonderful and are 100% safe, but that also have a story behind them. It is the story of two fathers who worried about the toxicity of clothing and stuff for babies. Because they couldn't find the right products in the market place they decided to develop their own products and created their own brand. And there Laladoo was born. The collection consists of beautiful high-quality Dutch design. Besides, every onesie or toy that you buy from us is made of 100% natural, biodegradable material. Just like the unique packaging by the way, in which you will also find a special surprise. With Laladoo you don't just give any present, but a present with a story. A good story.'

Laladoo

The product series

In 2007, Laladoo, developer of baby products, started to develop products that would be safe and of high quality for babies and the environment. They had become worried by the amount of toxic material used for baby products and felt it could be done in a different way. The designers chose organic cotton to protect the sensitive skin of the baby. The plastic cup that holds their products is made from maize starch and the foam used to fill up the package of maize and potato starch. Laladoo produces their products inspired by the Cradle to Cradle® principles, and all products can serve as nutrients in the biological cycle. Because the products are based on the Cradle to Cradle® philosophy, they are 100% non-toxic, 100% non-allergenic, 100% good for babies and 100% good for the environment.



© Laladoo



© 2009 EPEA GmbH

Non-certified product but using Trigem[®] fabrics,
inspired by Cradle to Cradle[®]

laladoo[™]
designed for baby joy



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METHOD

Bottled optimism
www.methodhome.com

Method is a San Franciscan company whose home-care products excel both in optical and chemical design. Eric Ryan and Adam Lowry founded Method in 2001 and set new benchmarks when it comes to shape and content in a field where one would not expect it in the first place: everyday objects like dish soap, spray cleaners, hand wash and so on. Method describes itself as 'people against dirty™'. In this way, method is about more than cleaning up home and body; it's about cleaning up the way we clean. Method sees its work as an amazing opportunity to redesign how cleaning products are made and used, and how businesses can integrate sustainability. The challenge is to make sure that every product sent out into the world is a little agent of environmental change, using safe materials and manufactured responsibly.

The product series

Over 60 products are Cradle to Cradle® certified at the silver level. The teams of scientists at EPEA & MBDC have rigorously assessed all ingredients, packaging materials, design processes and social practices. All the products follow the motto of: 'clean, safe, green, design, fragrance.' Method's cleaners use powerful formulas made with naturally derived surfactants that work by dissolving and removing dirt. Every ingredient used is rigorously assessed, so one can be completely sure of its safety. That's why Method's entire product line is both people - and pet-friendly, specially formulated to put the hurt on dirt without harming a hair on you or your loved ones' heads. Additionally, Method cares about the bottles. They make recyclable bottles from 100% recycled plastic resulting in zero waste and a 70% lower carbon footprint.



© Method

Consumption Products
Biological Nutrients



Service Products
Technical Nutrients



© 2009 EPEA GmbH



Silver Certified Product - Cosmetic Ingredients



Your contact at Method Products Inc.
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SYNBRA

A new biodegradable EPS

www.synbra.com

Synbra Technology B.V. has a leading position in Europe regarding Expandable Polystyrene (EPS) for insulation systems and industrial products and solutions for a wide range of markets. Synbra Technology B.V. in Etten-Leur, The Netherlands, is the in-house polymerisation and Research & Development facility 'Technology & Innovation' and the centre of excellence in materials and product development.

BioFoam® - PLA BioBeads®

Being produced from the renewable resource polylactic acid (PLA), BioFoam® is an addition to the current range of advanced EPS foam products offered today. BioFoam® has a different environmental profile over traditional oil based plastics. The base material of BioFoam® is PLA, which has a different production process than most other polymers. This polymer is derived from the production of sugar cane, which is being refined to sugar, then fermented to lactic acid, from which lactide is being produced. Lactide is finally polymerised to PLA. Compared to fossil fuel based

polymers, an important difference is that the raw material originates from biomass, namely sugar cane. After use, the BioFoam® product can be remoulded into a new product like EPS, or it can be completely biodegraded, composted or used for feedstock for recycling. Being 'designed for the environment' implies there is no chemical waste, which complies with the Cradle to Cradle® principles.

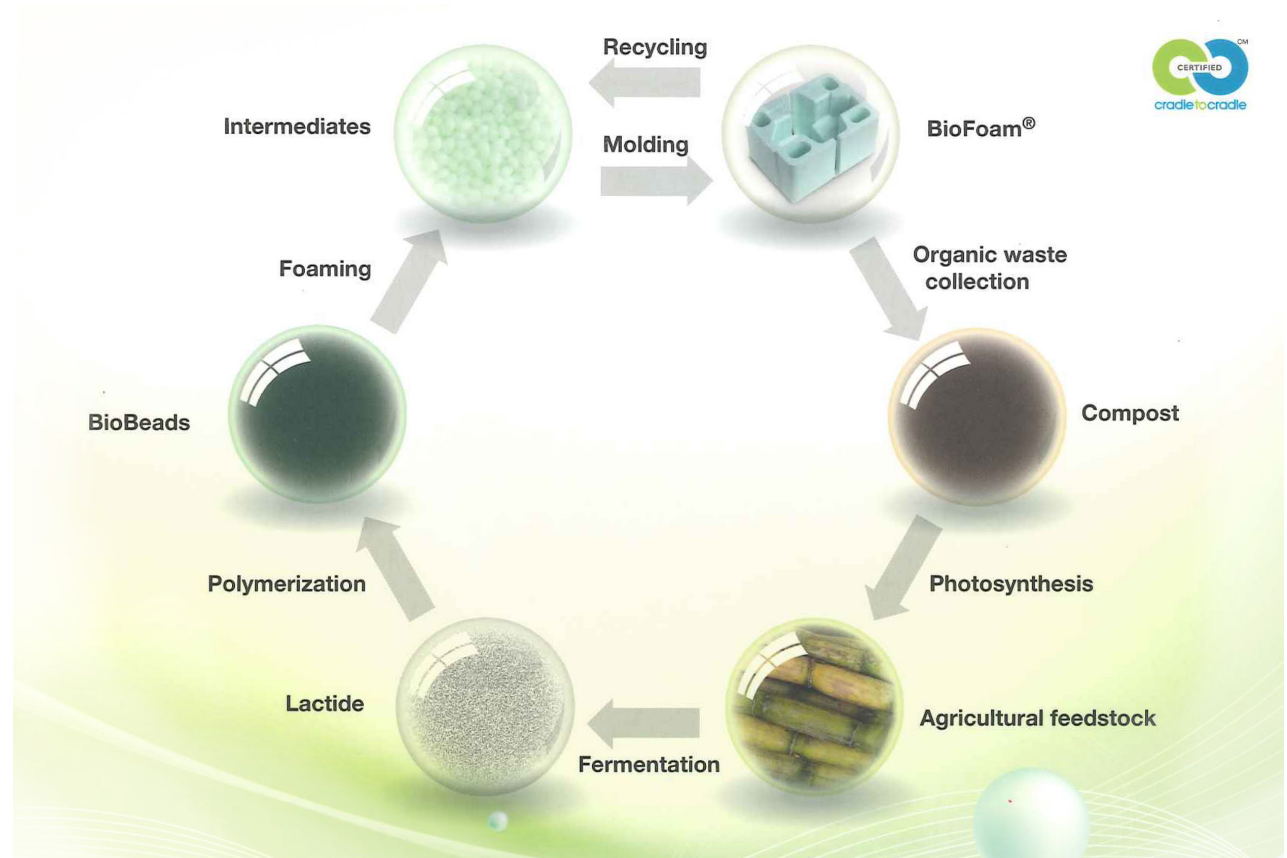
The physical properties of BioFoam® bear a good resemblance with EPS. The thermal properties are strikingly similar, which has led to an interest in the cooled transport for supplies of medical substances. BioFoam® is resistant to liquid-N₂ and CO₂ granules or dry ice, the latter is often used in the cooled transport chain.





Basic Certified Product

Synbra
Technology bv



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TERRASKIN®

Paper made from stone

www.terraskin.com

TerraSkin®

Terraskin® is a division of Design & Source with a commitment to R&D and innovation in sustainability around the globe. TerraSkin® is a combination of large amounts of mineral powder Calcium Carbonate (>75%) with a small quantity (<25%) of non-toxic resin PE (Polyethylene), which acts as a binder, combined to create an environmentally friendly, tree-less paper. TerraSkin® has very similar characteristics to traditional paper with a tensile and tearing strength ratio of 1:1 - 2:1. It also has many eco-friendly characteristics. First, the production of TerraSkin® requires no water, so the TerraSkin® papermaking process incurs no water pollutants. Second, as TerraSkin® contains high proportions of inorganic mineral powder, when the end user is done with the TerraSkin® product, the used paper will degrade back into mineral powder in 90-120 days when put in an environment of heat, moisture and UV light. TerraSkin® is free of bleach, strong acid or base. This means the production process is very clean and so is the product. If preferred, used papers can also be incinerated safely as

non-toxic resins will not emit smoke or poisonous gas by-products. On the production front, residues of inorganic mineral powder can be either reused or safely returned to nature. Most importantly, in producing TerraSkin®, the harvesting of trees is unnecessary, thereby safeguarding the natural environment's beauty and biodiversity for all living beings. Along with all of these advantages, TerraSkin® also has beautiful printing capabilities and a unique texture and feel. Because the paper is fibreless, it does not absorb ink like regular paper and therefore uses 20-30% less ink than regular paper. Images stay much crisper and cleaner because the ink doesn't bleed. TerraSkin® is water-resistant and inherently strong and durable. TerraSkin® received a Silver Cradle to Cradle® Certification from MBDC in 2007.



Consumption Products
Biological Nutrients.



Service Products
Technical Nutrient





Silver Certified Product

Stone paper
EmanaGreen

THE ORIGINAL
TERRASKIN®
Paper made from Stone



Your contact at Emana Green
Joan Ricart - jricart@terraskin.eu

THOMA

More than a building system

www.thoma.at

Thoma Holz GmbH is one of the companies who commit to the new social consciousness of the 21st century and therefore strives to make a contribution with the expertise in building wooden houses.

Thoma Holz100

Wooden houses are considered to be the healthiest in the world. With the concept of Holz100 Thoma has risen to the challenge of building wooden houses at the highest technical level. In a technologically superior way Thoma provides solid wooden building units without any glue nor chemicals. The houses are made as solid wood casing, where wooden dowels are used as the connecting material. How does it work in detail? Vertical and horizontal wood elements are densely layered, without gaps, to become solid and compact construction elements. Bone-dry wooden dowels penetrate these layers in the full strength of the wall element. Once in position, the dowels soak up any residual moisture and swell like growing branches into the surrounding wood.

Thanks to the strong connecting power of the dowels, a massive, solid whole is created out of the individual parts. The invention offers a number of benefits: The houses are resistant to subsidence and built windproof, they keep the world record in heat insulation, they offer five times more safety in the event of a fire and twice the sound insulation compared to conventional building methods, as well as radiation shielding, earthquake safety, 100% protection against convection and mould growth. Additionally the houses have superior indoor air quality. Holz100 is used not only for homes, but also for schools, nursery schools, hotels, offices and care centres, where the energy and the magic of the trees remains preserved unaltered.





Gold Certified Product **Thoma** 
IMMER SCHON GEBORGENHEIT



Your contact at Ing. Erwin Thoma Holz GmbH
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TRIGEMA

For the sake of environment

www.trigema.de
www.trigemachange.com

Trigema is known as a traditional German company manufacturing sportswear and leisure clothing. At Trigema, it is a declared goal to secure both Germany as an industrial base and jobs in the country. By producing exclusively in Germany, Trigema guarantees the best in quality and fast delivery. For the benefit of the environment, the production only follows the Eco-Tex Standard 100. Furthermore the products, like the in-house developed Cradle to Cradle® collection made out of 100% bio-cotton, contribute greatly to the protection of the environment.

Trigema Eco-Effective Cotton Apparel

Trigema has developed an eco-effective cotton apparel fashion collection of comfortable, high quality sports-, street- and underwear. It is made from 100% organic cotton and provided with carefully optimized dyestuffs and additives. It is certified according to the Cradle to Cradle® standards for the biological cycle and safe for the human body. Every single component, which the clothing is made of, is developed to be safe within the biological cycle.

To get the attention for their products from a wider target group, Trigema cooperates with a young fashion Designer, Mona Ohlendorf, who has created a modern, appealing and attractive collection from the certified Trigema fabrics. Two different collections of the certified product series 'Trigema Eco-Effective Cotton Apparel' are right now available on the market. First the already known 'Trigema Wellness Line' and second the new tailor-made 'Trigema Change' designed by Mona Ohlendorf.



TRIGEMA
change

© Trigema



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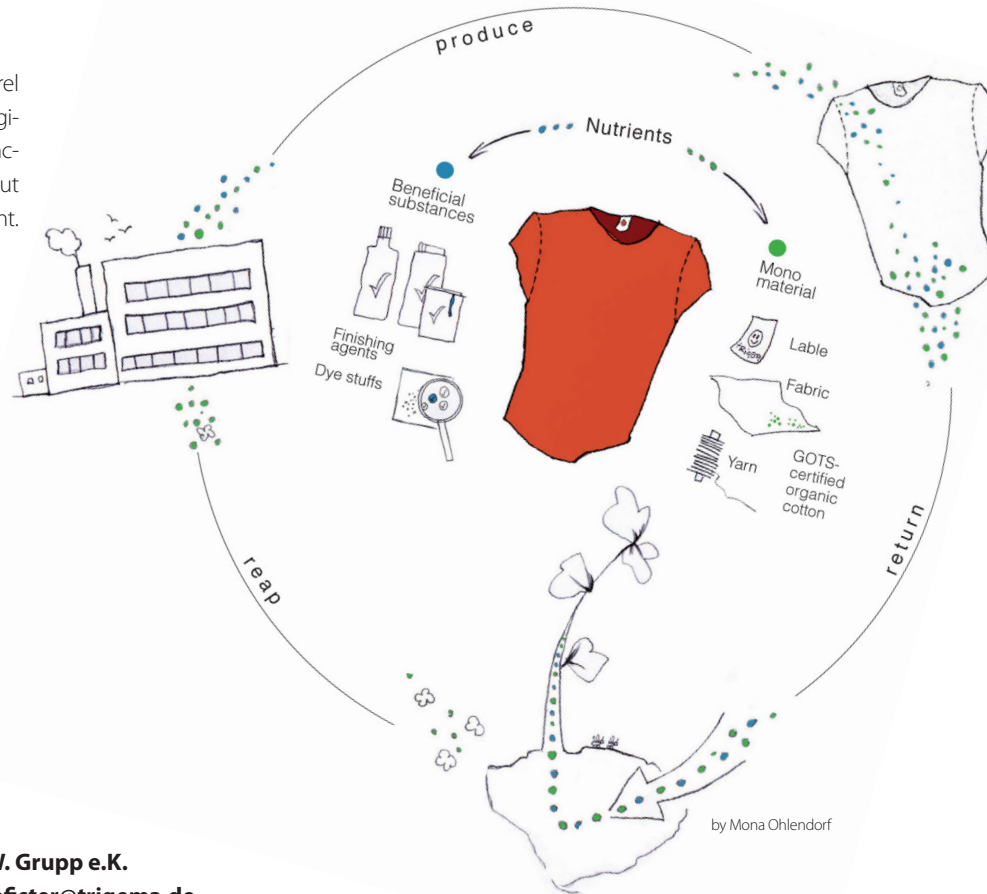


Silver Certified Product

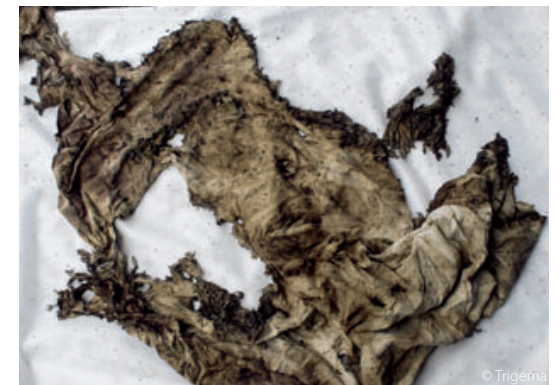


Biodegradable T-Shirt

Trigema Eco-Effective Cotton apparel serves as a nutrient within the biological cycle. Under defined circumstances, the cotton biodegrades without causing any harm to the environment.



by Mona Ohlendorf



© Trigema

Your contact at TRIGEMA Inh. W. Grupp e.K.
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Mona Ohlendorf - design-ohlendorf@trigema.de

VAN HOUTUM

Dare to be black

www.vanhoutum.nl

Van Houtum, producer of hygienic paper and innovative washroom solutions for professional end users, is the first manufacturer worldwide to produce Cradle to Cradle® certified toilet paper. Via professional cleaners, wholesalers and other outlets, their products and services find their way to various sectors within Europe. Van Houtum believes in certification for added market value to position their products. Its campaign for Satino Black: "Dare to be Black-it's so easy to go green" won a Red Dot Award, a prestigious design award. Van Houtum is redesigning its whole paper recycling process according to Cradle to Cradle® standards. It now has certified hand towels and is working on Cradle to Cradle® washroom solutions with certified soaps. Van Houtum became a Cradle to Cradle® company in 2010.

Satino Black Series

Under the Satino Black brand, Van Houtum produces Cradle to Cradle® certified products. These include high-quality, soft and white toilet paper and paper towels made from 100% recycled paper. The multi-ply paper quality also projects a look and feel of absolute luxury in combination with its super white colour. It is also the only hygienic paper in the world that is produced without any net CO₂ emissions and is allowed to display the following environmental labels: FSC recycled, European Ecolabel and Cradle to Cradle®. This product is also available as hand towels.





Silver

Certified Product



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XERO FLOR®

Easy on your roof
and immediately green

www.xeroflor.com

“Roofs under snow and the blazing sun, pointed roofs, barrel roofs, roofs of incredible size. Roofs in cities and business parks, on stormy coasts, at great heights. Extensive roof greenery from XERO FLOR® protects roofs worldwide - always in the best way for each situation. Technically good and effective, good for the roof, people and nature. That is our system.” XERO FLOR®

XERO FLOR® International GmbH is a specialist for extensive roof greening. In their mind, not only roofs are a versatile basis for greenery, but also track beds, airports, walls, and roadsides. The large variety in implementation is beautiful as well as useful. Research and development of XERO FLOR® make sure that the fauna is used according to its best abilities. Constantly, new greening systems are developed. They ensure the greenery's durability and the build-up's stability for years and decades. They ensure positional security against wind uplift, fire prevention - and nature conservation. Sound protection, summer heat insulation, and water storage/retention of green roofs are scientifically proven.

XERO FLOR® moss mats

Moss mats are economical and easy to produce, robust and versatile. Therefore they are the perfect product for the green covering of roofs. They can be used on nearly all vertical and horizontal surfaces and require almost no care. Each XERO FLOR® greening consists of various layers: the vegetation layer and layers for the foundation, which are the carriers for the green and which act as storage for water and fertilizer. The moss mats function like a microfiber cloth, thus particulate matter is fertilizer and food for them. Ammonium nitrate, emitted by industrial processes and car traffic, is a fertilizer for mosses: Mosses bind fine particles and ingest ammonium nitrate directly through their leaves. Metabolic processes convert those salts into plant matter.





Silver

Certified Product

XeroFlor®

Also organic fine particles are food for bacteria, which populate the leaves of the mosses. There they metabolize organic particulate matter, which are fine particles produced from particulate and tyre abrasion. The bacteria produce fertilizer for the mosses, because the products from the metabolic processes from bacteria are on the other hand again re-usable for the mosses. In sum, the metabolic processes of mosses and bacteria remove approximately 75% of fine particles. The rest which consists of insoluble inorganic dust is bound by the mosses and immobilized - an important environmental contribution.



The 10 functions of moss mats

1. Moss mats are universal biological protective coatings. They are versatile, robust, economical, easy to clean and therefore widely applicable.
2. Moss mats are humidifiers. They release water vapor slowly into the air.
3. Moss mats produce oxygen.
4. Moss mats clean rain water. They filter air pollutants from the rain water, which in consequence no longer seep into the soil.
5. Moss mats soften water. They remove carbonates from the water and therefore lower its pH-value. Ideal irrigation water is created again and again.
6. Moss mats bind fine particles. Their big, finely structured and positively charged surface holds on to the particles.
7. Moss mats convert fine particles into biomass. The ammonia salts are transformed by the moss mats themselves, the organic fine particles by the bacteria that live on the mosses.
8. Moss mats take up air pollutants. Gaseous air pollutants, above all nitrogen compounds which are dissolved in water are absorbed.
9. Moss mats bind heavy metals. They can remove various toxic and harmful substances from water.
10. Moss mats are antimicrobial. Above all in interiors they are cleaning the air from germs like bacteria and fungi.

Your contact at XERO FLOR International GmbH
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Inga Schulte - I.Schulte@xeroflor.com



© Xero-Flor

AHREND

Humanising_Spaces

www.ahrend.nl

Koninklijke Ahrend NV is a company developing innovative solutions for the working environment and furniture that combines timeless design with functionality, ergonomics and quality. Together with customers, architects, and other partners Koninklijke Ahrend NV furnishes environments where people are encouraged to perform to the best of their ability. Ahrend ensures that people can work professionally, productively and with pleasure.

“Give people space and they will develop. Give them room to interact and co-create and new forms of cooperation and coexistence will emerge.” Ahrend

This is the credo, after which Ahrend shapes environments of working, learning and living that stimulate people. Ahrend provides the conditions that enable people to excel as individuals and in combination with others, creating permanent added value in dynamic environments through constant interaction.

230, 250 and 2020 desk chairs and 500 table series

In line with its ambition to become the European market leader in effective human spaces, Ahrend puts eco-effective design and Cradle to Cradle® principles first - products that combine functionality and a focus on the physical and mental well-being of people with fully recyclable materials that are actively designed to be cycled in closed loops. Thanks to the solid construction and defined materials an Ahrend chair can be easily ‘refreshed’ by changing the covers, and can often be put to use at a new location after a busy life. The upholstered parts can be simply replaced through easy press mechanisms, which do not need any glue or screws. No Ahrend chair contains chrome or any other material with a negative impact on the environment. All products feature characteristic properties: due to the Ahrend Next_Life program the products are ready for:

- Re_Fresh: thorough cleaning.
- Re_Fit: revitalization to update design and functionality
- Re_Turn: Re_Use (re-use of products/parts) or Re_Cycle (products are picked up and disassembled)



© Ahrend

Consumption Products
Biological Nutrients



© 2000 IFEA GmbH



Silver Certified Products **ahrend**



Ahrend 230



Ahrend 250



Ahrend 500



Ahrend 2020

Your contact at Koninklijke Ahrend NV
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BACKHAUSEN

The fabric of many lives

www.backhausen.com

The company Backhausen interior textiles GmbH has always been very innovative and has done pioneer work with introducing the first permanent flame retardant fabrics or three dimensional pleated fabrics, which correlate to the vision of Cradle to Cradle®.

For over 160 years, Backhausen has developed and produced top-quality and design-driven upholstery and curtain fabrics across a wide range of styles. Textiles from the house of Backhausen are available in forty countries worldwide through speciality shops, interior work contractors and furniture manufacturers.

Returnity®

Returnity® is the world's first fabric to combine the flame retardant properties of Trevira® CS, with the environmental properties of Cradle to Cradle®. This means, that all Returnity® fabrics are 100% recyclable. Trevira® CS is a fabric made from polyester, which is a technical nutrient. The existence of that nutrient in the technosphere is made possible by a revolutionary eco-friendly chemical optimisation process developed by both, Backhausen and EPEA. All advantages of the flame-retardant fabric Trevira® CS have been combined with the benefits of Cradle to Cradle®-compliant products – at the end of its long life as a product the fabric can be returned and recycled. The result: Returnity® starts a new life as a new, residue-free product, the cycle of usage proceeds without interruption. Environment and coming generations have reason to breathe easy. Returnity® mainly is applied in the interior, e.g. as upholstery fabric or curtain – but is versatile enough for many different uses.



Consumption Products
Biological Nutrients

Service Products
Technical Nutrients



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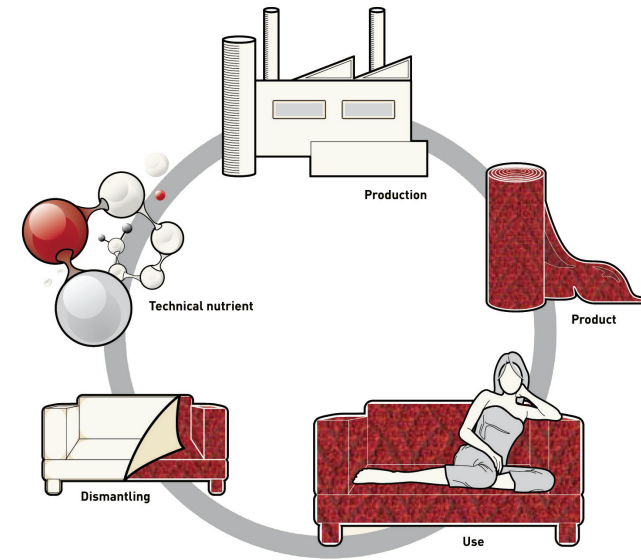


GOLD Certified Product

backhausen
interior textiles · since 1849

Return Returnity®

Backhausen offers an easy service of return and re-use: When the fabric is sold, the retailer stamps the 'Returnity® Returns' note and hands it over to the customer with the fabric, which is also marked with the Cradle to Cradle® logo on a small product card. When the fabric is no longer needed, the customer sends an e-mail to service@returnity.at and a network of logistic partners and recyclers arranges the recirculation into the recycling process. Backhausen guarantees recirculation or re-use by licensed Cradle to Cradle® partners.



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DESSO

The floor is yours

www.desso.com

Desso Holding B.V. is a manufacturer of innovative carpet systems and artificial grass who has always given particular importance to manufacturing beautiful and useful products. Desso is a leading European manufacturer of carpet and carpet tiles for commercial and domestic applications, as well as in the hospitality, marine and aviation markets. Desso is also market leader in artificial turf and reinforced natural grass for sports fields. Now the Cradle to Cradle® quality is added as another quality dimension. With this vision, quality is not only comprised of the conventional product attributes, but in a wider sense of the consequences for humans and the environment. Desso's products imply exactly that and go a step further by integrating the eco-effective Cradle to Cradle® design paradigm, to ultimately manufacture products from pure materials that are safe for humans and at the end of their life-cycles biodegradable or fully recyclable. "We have committed ourselves to designing products containing only positively defined materials which are safe for human use and are biologically or technically recyclable at the end of their useful lives."

Desso EcoBase® Line

As a part of this strategy, Desso introduced EcoBase® in June 2011. Thanks to this product development, Desso is the only manufacturer of carpet tiles worldwide, who has received the Cradle to Cradle® silver certification for an entire carpet tile.

All components of the carpet tile serve as technical nutrient – the backing as well as the upper yarn. At the heart of the EcoBase® design is the desire to create a product which can be dismantled for easier re-use of its components and materials. So called Refinity® was developed as a technique to separate the yarn and other fibers to be separated from the backside coating. The backing is developed with particular focus on disassembly and 100% safe recyclability. After an additional chemical purification stage, the PA (Polyamid) yarn is converted back to the basic material and returned to the yarn manufacturers for production of new yarn. Thus only two material streams come up for recycling. EcoBase® can be fully recycled in Desso's own production process after separation. This results in a continuous technical cycle.



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Silver Certified Product

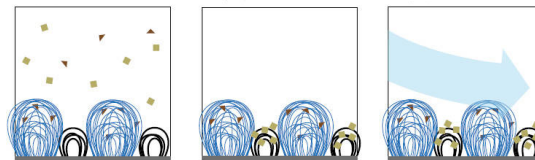
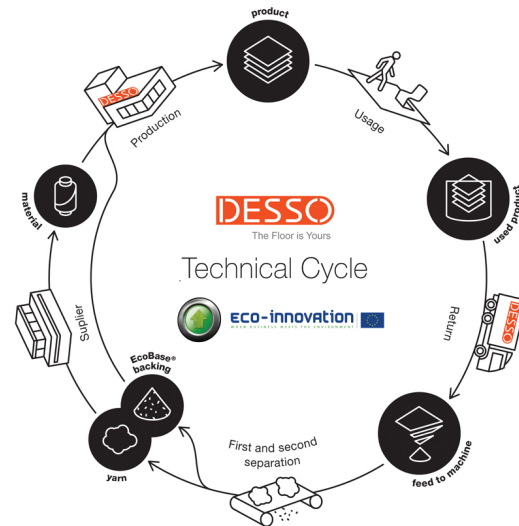


Take Back Program

With regards to its commitment to Cradle to Cradle®, Desso will introduce a take-back system for its carpets, the Take Back™ programme: collecting the used carpets from customers and ensuring that they are re-directed towards a useful re-utilization. On a regular basis, new Cradle to Cradle® targets are defined and implemented to make Desso's carpets a quality product with an entirely positive impact.

Desso AirMaster®

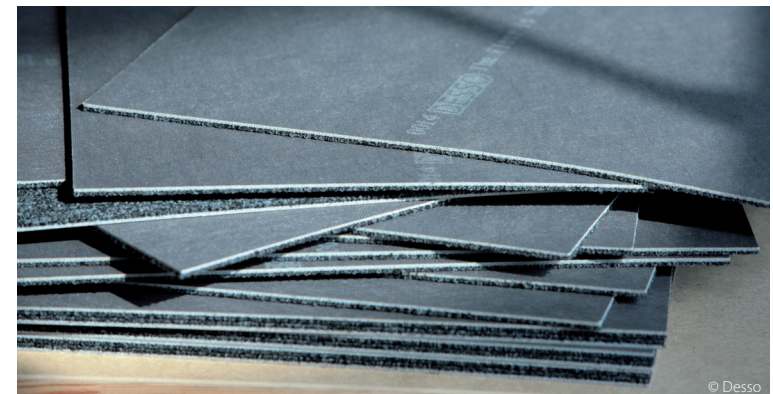
Contrary to general perception, soft carpet ensures cleaner air compared with a hard floor. With Desso AirMaster®, the concentration of fine particles in the air is as much as eight times lower than with hard floors and four times lower than with standard carpet. So that means cleaner and therefore healthier air in your home. Desso AirMaster® is a unique and patented floor concept. This revolutionary carpet has been specially developed to absorb harmful fine particles in the living environment. Desso AirMaster® absorbs the fine particles until the next time the carpet is vacuumed, resulting in a cleaner indoor climate.



Very fine dust is captured and retained in the fine yarns of the Desso AirFilters™.

Coarser fine dust is captured in the thicker yarns of the Desso DustCollectors™.

The unique structure of Desso AirMaster® prevents the dust from becoming airborne again.



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JALEMA

The filing specialist

www.jalema.com

Corporate Social Responsibility (CSR) is not a theme but part of day-to-day operations at Jalema. A harmonious combination of people, planet and profit enables us to offer an efficient package of archiving solutions. At Jalema, we put our words into actions by giving concrete meaning to our sense of social responsibility. One way in which we do this is by providing meaningful work to the mentally disabled and by developing new products on the basis of the cradle to cradle philosophy. We have also set up a special social fund that supports charitable initiatives both in the Netherlands and abroad, and invest in product and other innovations that help preserve jobs in the direct vicinity. An integral part of our company culture is consideration for people, their needs, their drives and their well-being. This flexibility in turn enables us to quickly respond to changing market conditions.

Frank Demarteau, Vice Director of Sales & Marketing

Jalema is specialized in filing solutions. Jalema files and folders are essential to maintain order and overview of the abundance of paper data carriers in today's companies, organizations and institutions. Jalema work files and document-handling folders save time and space when it comes to storing and retrieving letters, printed documents – with or without handwritten notes – folders, brochures, catalogues, newspaper cuttings, memos and other office documents. Jalema also offers various solutions for the home office and the presentation of documents

The product series: Arnato, Infinio, Jaleco, Secolor

Jalema's objective is to structure its products and processes according to the Cradle to Cradle® principle. Among the product series of Infinio and Secolor several products like foolscaps, files and partition strips are Cradle to Cradle® certified.



Consumption Products
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MOSA

Mosa. Tiles.
www.mosa.nl

All actions of Mosa are primarily shaped by entrepreneurial approach. Due to this corporate policy, Mosa succeeded in being the first manufacturer to produce ceramic wall tiles and floor tiles that have been certified according to the eco-effective principles of Cradle to Cradle®. This approach is increasingly supported by regulations and laws that stipulate the use of sustainable materials in the construction sector. At Mosa, people like to get things right from the very beginning, and therefore set up an intense cooperation with EPEA. After going through a three year development process, in December 2010 nearly the whole product range of Mosa received Cradle to Cradle® silver certification for 99% of its products. Mosa is one of the first tile manufacturers in the world with Cradle to Cradle® certified tiles. Their Wall Tiles and their Floor Tiles program received the certification. Devoting attention to innovation and design are important values for Mosa. In its design department, ten people work continuously on developing new products. Mosa sells its award winning tiles in 50 countries and on all continents. You can find Mosa tiles in several appealing international projects.

Mosa Tiles

Within the Cradle to Cradle® certification process, criteria from five main categories were used: raw materials, recyclability, energy use, water management and social responsibility. Mosa ceramic tiles are produced using environmentally friendly, non-toxic and renewable raw materials. Secondly, they are suitable to circulate in the technological cycle, which is the defined sphere where Cradle to Cradle® service products can be safely circulated. Additional advantages are that Mosa tiles contribute to a good internal climate, and when used in combination with a low-temperature system have beneficial effects on the energy consumption pattern of buildings. Finally, Mosa offers services like a take-back and recycling system, which are an important decision criteria under the BREEAM certification scheme for buildings.



Consumption Products
Biological Nutrients



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Silver Certified Product Mosa. Tegels.



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ORANGEBOX

Great design is when there's nothing left to take away

www.orangebox.com

Improving environmental performance is not a new concept for Orangebox Ltd, a company who designs and develops office furniture. Their environmental approach to product design focuses on the use of defined materials and the use of minimal energy for product manufacturing. All of the products are designed for long service life. The company ensures that the supply chain is optimized to aid consumption by actively reducing 'product miles'. They also demand their key suppliers to support their environmental aspirations by acting as material researchers and innovators.

Ara chair and Ara Mesh chair

Ara is a task chair developed and manufactured to achieve Cradle to Cradle® accreditation. In the ARA chair you will already find a high percentage of recycled materials. The goal was to make Ara as simple as possible, both visually and functionally. Therefore Orangebox has established a relationship with EPEA to develop the Ara chair. For the company it is important to ensure that the materials they are using are truly safe, for humans and for the environment alike, and are also successful in technical cycles of reuse and recycling. This means looking in much more detail at every chemical ingredient in the materials used; to determine which inhibit this aim and need to be substituted or removed as a result. The quality of the Ara chair is not only defined through its recycling in the technical cycles, but also through its properties in use and ergonomics. For example, the design of the adaptive elastomeric membrane is a simple solution to a more complex question. The pattern in the membrane not only gives the chair its distinct visual character, it also uses less material and is extremely comfortable while delivering continuous support.



© Orangebox



© 2009 EPEA GmbH



Silver Certified Product

orangebox

Take-Back-Service

Orangebox is striving to increase the recyclability of their products. Therefore, they provide an end of life cycle solution for unwanted seating. Having set up a recycling facility at the manufacturing site in South Wales and having followed the principles of Cradle to Cradle®, Orangebox is now able to offer a comprehensive 'Free Of Charge' take back service for the Ara chair. Used products will be collected by a delivery fleet and if reuse is not possible, they will be disassembled and the materials recycled via the appropriate channel. This is the crucial step for the company in being able to create true continuous material flows. The materials invested in the product can be recovered and reused rather than being down-cycled and one step closer to the landfill. At the moment Orangebox is at the start of this journey, but continues confidently because for them Cradle to Cradle® represents a potential future standard for intelligent manufacturing.



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STABILO

Office and stationary goods

www.stabilo.com

As a family-owned business with a 150 year history, STABILO is particularly committed to environmental protection. Only sustainably generated success can lead to continuous growth and make a global brand credible and desirable. They develop innovative office supplies and stationary goods, which are particularly known among children.

STABILO GREENpoint

It was against this backdrop that, following extensive research and great patience, the world's first pen made of 98% recycled plastic (PP) was developed. Almost all components of the original material, derived from crude oil, have been replaced with recycled goods. The combination of innovative materials, design and writing features has also been a great success.

To sum up: with its environmentally-friendly and recyclable materials, the Cradle to Cradle® certified STABILO GREENpoint meets modern requirements in ecological quality – 98% recycled, 100% clear conscience! The target group for the pen are not only environmentally-aware school children, but also teachers, parents and office workers. They appreciate the 6 different colours and the strong wide tip of 0.8 mm diameter - for soft writing, expressive highlighting and color-intensive structuring.



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Basic Certified Product



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©Stabilo

STEELCASE

The chair with a brain and a conscience

www.steelcase.com

'Think before you create! - Design isn't just about style. It's about integrity of materials, functional integrity and intent. Think is a truthful chair - the result of open dialogue between engineers, environmentalists and designers.'
Glen Oliver Löw

Steelcase Inc, the global leader in the office furniture industry, helps people have a better work experience by providing products, services and insights into the ways people work. The company designs and manufactures architecture, furniture and technology products.

Think® chair

Think of the future! The Think® chair is developed in consideration of where it comes from, how it is made, and what it will be when it is no longer a chair. 41% of the Think® chair (by weight) is made from recycled materials. When it's finally time for new chairs, Think® goes easily into its next life. The Think® chair is 99% recyclable by weight. With the Steelcase Environmental Partnership Steelcase takes responsibility to take the chair into the next phase of its life cycle - be it resale or refurbish, donation to charity, or recycling. Customers can easily recycle the Think® chair themselves, because it can be separated with simple hand tools into well-labelled components. Disassembly takes just five minutes with ordinary tools!



©Steelcase





Silver Certified Product

Steelcase

Think about what's next

After the chair's use period, all materials of the Think® are recovered.

- Acetal: This hard plastic in Think® chairs will be used to make bearings, gears, rollers, pen cases and plumbing fittings.
- Aluminum: The Think® chair could be part of future cars, kitchen appliances, power tools — even golf clubs.
- Nylon: Someday hair brushes will be made of material recycled from the Think® chair. Nylon components also could become glides or casters for other chairs.
- PolyEthylene/Terephthalate (PET): In the future, people could soak in bathtubs recycled from Think®, or it could be part of fishing poles or air conditioning filters.
- Polyurethane: Future carpets will be made of former Think® components.
- Polypropylene: Perhaps a new coffee maker, washing machine or car fender will be products made from Think®.
- Steel: It is not possible to begin listing all the places steel is used, but the Think® chair could very well be there.
- Zinc: A door handle, lock or sink faucet may someday be made from recycled Think® chairs, or perhaps the rust-proofing on your future car.



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I:COLLECT

Rethink. Recycle. Reward.

www.ico-spirit.com

In partnership with retailers, I:CO collects used shoes and textiles directly on the sales floor, and organizes the complete operation of collecting and sorting, right up to professional recycling worldwide. Why is the recycling of fabrics a big business for them? Because nearly 150 million tons of shoes and clothing are sold worldwide every year. Today, only a small percentage of that is reintroduced into the production cycle as reclaimed and renewed materials. The good news is that this percentage is rapidly increasing. Nevertheless, the planet suffers from mass production and mass consumption of clothing and textiles. The volume of globally discarded recyclable clothing is staggering. Once past their initial wear cycle, billions of tones of apparel and shoes could easily be repurposed into raw materials or second-phase wearable clothing to consumers in challenged economies. Repurposed clothing and shoes is not only an economically but also an environmentally-friendly retail alternative. When items are no longer wearable, I:CO transforms unusable clothing into industrial products ranging from cleaning cloth, paper, insulation, carpet underlay,

surface covering and textile fibers. Having this infrastructure and service systems, they own the potential to play an important role in closing the material chains of Cradle to Cradle® products in future times.

I:Counter

With the so called I:Counter, I:CO inspires customers to recycle their shoes and clothing and therefore launches a reflection on consumer behavior and maybe also a paradigm shift. Due to an easy take back service the customers become aware about environmental issues. How does it work? In a participating retail store the customer drops off his old and used shoes and clothing to the I:Counter. The I:Counter contains the shipping box and a built-in scale, which receive and weigh the deposited goods and instantly dispense a voucher, good for a purchase at the participating retail store. In participating customers help give valuable resources another life and keep materials in a continuous cycle. They save money – and they do something for the environment which gives them a good feeling.



Consumption Products
Biological Nutrients





RETHINK. RECYCLE. REWARD.

“Everything we humans use belongs to an everlasting cycle: Collection, Sorting, Recycling.”
I:CO



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VAN GANSEWINKEL GROEP

Waste no more

www.vangansewinkelgroep.com

Waste no more – That is the credo of the van Gansewinkel Groep. The van Gansewinkel Groep is a waste management services provider and supplier of raw materials. The specialty of the company consists of different fields of activities: Every day hundreds of trucks are on the road collecting waste from customers and transporting it to the different processing locations of van Gansewinkel. As supplier of raw materials the company is specialized in the separation and recycling of waste. Separation takes place using innovative recycling techniques so that waste gets a second life as raw material. In doing so, waste is seen as the valuable beginning of a new cycle. And as such, waste embarks on another journey as new raw materials and even energy. The company's views on raw materials, energy and waste management are in harmony with the Cradle to Cradle® philosophy. Cradle to Cradle® assumes that products are manufactured in such a way, that at the end of their use period they become reusable as raw ma-

terials to create new, similar or premium products, or are biodegradable. This leads to infinite product cycles without any useless waste residues being created. The success of the Cradle to Cradle® concept depends on collaboration between various parties throughout product chains and across product cycles. Making a Cradle to Cradle® product alone is not enough. It also requires that raw materials are delivered back to the manufacturer after use of the product (or another manufacturer which can use the raw materials). This requires return systems and processes and parties who prepare products for reuse – that is where van Gansewinkel Groep defines its duty.



© Van Gansewinkel Groep





Silver Certified Product

van Gansewinkel Groep 

Van Gansewinkel ■ Coolrec ■ Maltha ■ AVR

Van Gansewinkel Office Paper

Every day in every household and industry, large volumes of paper and cardboard are 'binned'. Van Gansewinkel collects the "waste" - office paper and recycles it in house before delivering it as a product to its partner Steinbeis Papier GmbH, a dedicated paper manufacturer. Steinbeis produces, in an innovative and clean process, a new high quality white office paper made from 100% recycled paper. Together with partner Océ this product is brought back to the clients where the waste paper was originally collected. This way the loop is closed with significant positive impacts on the environment. Van Gansewinkel Office Paper is the first office paper in the world with Cradle to Cradle® certification.



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(www.c2cislands.org, www.wisle.org)



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European Union



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Development Fund

The Interreg IVB
North Sea Region
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*Investing in the future by working together
for a sustainable and competitive region*

cradle to cradle  islands

